

Multifunction Data Port – Third Amendment (June 14, 2005)

Remarks:

The title of this patent application identifies the invention as a “multifunction data port”. While one function of this data port may be the reading and processing of data from utility meters, the other important and distinguishing functions and utility of the data port enable electric companies to compete with telephone and cable companies by offering services in addition to meter reading. It is these other functions of the present invention that enable the electric utilities to use their existing infrastructure to provide telecommunications, multimedia, Internet access as well as load management and energy savings options to house owners. The novelty and utility of these extra functions, as well as the potential revenue they can bring to the electric utilities, make the subject invention here very different from all earlier devices that were designed solely to read utility meters and communicate power usage data between the utility and its customers.

In addition to apparatus claims, the subject patent application claims methods for using the additional functions provided by the multifunction data port. These functions can be used, for example, to reduce Internet fraud and provide security for financial transactions as described in the Amendments to Specifications and Revised Claims above. These method claims of the present invention, for example, also enable the electric utility to adjust thermostats to shed load, providing energy savings and efficiencies. Other method claims of the subject invention provide a system for the distribution of power, telecommunication and Internet access, and energy cost savings in multi-unit dwellings.

The applicant has further endeavored to address each of the points cited in the Office action of 01 April 2005, as follows:

1. Applicant has noted the changes to patent practice and procedure cited by the Examiner on page 1 at 1.
- 2 Applicant notes that the Office action mailed 05 January 2005 was withdrawn.
3. Applicant notes that the application is eligible for continued examination.
4. Applicant notes that the “claim for benefit of an earlier filing [[data]] date ...” under 35 U.S.C. sec 119(e) and 35 U.S.C. sec. 120 has been acknowledged.

5. Applicant notes that the proposed drawing corrected filed 23 April 2004 has been approved.

5.1 Applicant has submitted and correctly labeled Replacement Sheets for all the drawings submitted in the original application and has corrected numbers and descriptions of all the prior drawings presently submitted as Replacement Sheets.

6. The Specification drawings have been checked to the extent necessary to determine the presence of minor and major errors and these corrections are also noted in the Detailed Description of the Preferred Embodiments.

7. Claims 4, 6, 7 and 9-20 have been amended in view of the Examiner's comments that said claims were "indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention," and the applicant respectfully submits that these changes now distinctly claim the subject matter the applicant regards as the invention.

7.1 In regard to claim 4, which was "unclear and confusing" as to the term and operation of the "communications network" of claims 1 & 4, the applicant has amended the claim to make clear what the "communications network" was and is with respect to the subject invention, namely a digital services network, or the Internet or an intranet.

7.2 In regard to claim 6 and the confusing phrase (prior to present amendments) "for storing digitized voice messages generated a utility company and received by said data port interface," the claim was amended as suggested in the 01 April 2005 Office action.

7.3 In regard to claim 7, the A) identified satellite location is now used in the claim, as presently amended, and B) the location and time of an emergency condition is now detected in the claim, as presently amended to clearly show how this information could be communicated to the utility company.

7.4 In regard to claims 9, 13, 15-17, 19 & 20, there is now a clear and definite interconnection between one or more of the recited limitations of these claims, and it is respectfully submitted that one of ordinary skill could now determine from the claims, as presently amended, whether or not they are in fact making and/or using the claimed invention.

- A) Claim 9, as presently amended, makes clear that “changes in the cost or availability of electric power” can be transmitted by the utility and received by the house owner in the claimed invention, a multifunction data port, so that this variable may be used to perform the recited function of modifying the thermostatic settings of at least one home device.
- B) In regard to claim 13, and how it can be determined whether the vendor is or is not trustworthy, the invention as recited in this claim, as amended presently, supplies sufficient information to determine said trustworthiness, as is respectfully submitted here.
- C) In regard to claims 15-17, and how the inputting step would be accomplished by Internet browsing (claim 15, prior to amending), and the “telecommunications” term of claim 16 (prior to amending) and the “video communications” term of claim 14 (prior to amending), the claims as presently amended correct and clarify said language in order to overcome the Examiners comments in the Office action that said language was “vague, indefinite, and unclear.”
- D) In regard to claim 19, and the “de-scrambler disposed in said utility meter,” the applicant has amended the claim, and along with amending the Specifications, has made clear that the present invention is for a multifunction data port and that said de-scrambler is part of the claimed data port invention, and that in claim 1, as presently amended, and in other presently amended claims, said data port for its proper operation makes use of a de-scrambler, whether said data port and its de-scrambler are “disposed in said utility meter” or is/are coupled or connected to said utility meter, as noted in the presently amended claim 19 and claim 1.
- E) In regard to claim 20, and the “router disposed in said utility meter housing,” said claim, as presently amended, shows (1) how the router would fit into the data port as said data port is recited in claim 1, as presently amended; (2) explains why there is a router in said data port in order to communicate with more than one device or appliance within house owner’s premises or with other devices to which it is transmitting or receiving information; and (3) what functions the “router” would have in the data port as said data port is recited in claim 1, as presently amended, and in claims 2, 3, 8, and 19, as presently amended.

7.5 In regard to claim 10, since the data port of claim 1, as stated in the Office action “includes a computer” with in the housing of an utility meter and as recited in claim 10 the device includes a ‘computer’ applicant’s reference to a computer at lines 2, 3, and 5 of this claim” as presently amended is now clear in defining said computer’s function in the data port apparatus, as respectfully submitted here.

7.6 In regard to claim 10, wherein it was stated, “said device is selected from the group consisting of a television, a computer and a telephone,” it is made clear in this claim, as presently amended, why the message received from the utility company is communicated to one or more of these devices as selected by the house owner and/or the utility company.

7.7 In regard to claim 11 and as stated in the Office action, “the confusing phrase ‘using the data port interface apparatus of claim 1 as a data port terminal over a communications network’”, the claim, as presently amended, makes clear how A) the subject invention data port terminal operates “in” a communications network supplied by or connected to a digital services provider, and not “over” a communications network; and B) how said apparatus allows a method of conducting secure financial transactions “in” said communications digital services network.

7.8 In regard to claim 12 and, according to the Office action, the confusing phrase (prior to present amendments) “using the data port interface apparatus of claim 1 as a data port terminal over the Internet,” the applicant has A) amended the language of the claim to show use of said data port terminal “in” Internet, and B) that this function of the data port is in fact for accessing the Internet. The preamble of the claim, as presently amended, has also been corrected to reflect the Examiner’s comments on page 6 of the Office action.

7.9 In regard to claims 11 &12, it is respectfully submitted that one of ordinary skill would now recognize either A) the verifying of the data port (claim 11, as presently amended) or B) the verification that the data port initiated a transaction (claim 12, as presently amended), as conducting a secure financial transaction utilizing the present invention, a multifunction data port and its attendant electronics.

In regard to claim 12 and applicant’s use of the phrase “secured transaction” in steps 1 & 4, and its confusing language noted by the Examiner at page 6, the preamble to this claim, as presently amended, now clearly defines the

steps for the “purchase” and other secure transactions, and what constitutes a secure transaction which may or may not involve a purchase, as viewed and understood by one of ordinary skill, as the presently amended claim teaches.

7.10 It is respectfully submitted that claims 11-18, as presently amended, are no longer inoperative and no longer lack utility for the recited purpose of the disclosed and claimed invention since: A) one of ordinary skill would recognize both (1) the verification function of the data port (claim 11, as presently amended) and (2) the verification that the data port terminal, with input from the house owner, initiated said transaction (claim 12, as presently amended), and that these claims, as presently amended, now “particularly point out and distinctly claim an invention that would accomplish the intended use of the claimed invention,” as stated by the Examiner at page 7 in pointing out that said claims prior to present amendments were inoperative. Claims 11-18, as presently amended also now teach B) that one of ordinary skill would recognize that (1) the invention recites steps for the determination of a breach of the data port in transmitting and receiving data (claim 14, as amended), and that said claims, as presently amended also recite utility for the disclosed purpose of the invention.

7.11 “Applicant’s inclusion of the process claims 11-18 into machine/apparatus/device claim 1 by dependency created an improper hybrid claim and hence the recited combination of claimed subject matter is confusing,” according to the Examiner in the Office action, and these claims, as presently amended now specifically delineate whether said claims are process, machine or manufacture claims.

7.12 For the above reasons, respectfully submitted, the applicant has duly amended the claims for the subject invention, particularly pointing out what is regarded as the invention, and eliminating or amending confusing or vague language.

8. Subject to the conditions and requirements of 35 U.S.C. sec. 101, the applicant respectfully submits that based on amendments enclosed herein and above, what is now disclosed is an apparatus for a multifunction data port providing an interface between a digital network and electronics in residential or commercial structure, and methods for deploying said data port in novel and useful ways serving the needs and wants of both the occupants of the residential/commercial structures and the utility companies.

8.1 It is respectfully submitted that claims 9, 13, 15-17, 19 & 20, formerly rejected under 35 U.S.C. sec 101 because the invention as claimed, before present amendments, was direct to non-statutory subject matter, are now sufficient as presently amended. A) As stated in *In re Musgrave* 167 USPQ 280 at 289-290 (CCPA 1970): “All that is necessary, in our view, to make a sequence of operational steps a statutory ‘process’ within 35 U.S.C. 101 is that it be in the technological arts so as to be in consonance with the Constitutional purpose to promote the ‘useful arts’”, as quoted by the Examiner in the Office action. B) The sequence of operational steps by the applicant in the enclosed claims as presently amended falls within the purview of *In re Musgrave* and 35 U.S.C sec. 101, and *In re Sarkar* 100 USPQ 132 @136-137 (CCPA 1978) so as to promote the progress of “useful arts” with the new and useful process taught, and apparatus disclosed, by the subject invention in the enclosed claims as presently amended.

8.1.2 Applicant believes he has overcome the argument stated in the Office action, analogizing the present invention and its claims 11-18 (prior to present amendments) to claims 14.-39 of *In re Sarkar*, wherein clear and definite connections between steps of a claim in an invention were not established. Applicant respectfully submits that the enclosed claims 11-18 as presently amended successfully address the concerns in this section of the Office action by delineating and connecting the steps critical to teaching the invention.

8.1.3 Claims 9, 13, 15-17, 19 &20 were said by the Examiner to be “directed to a series of devices for performing various functions,” and were “not clearly and definitely interconnected to one another and therefore do not provide an operative useful machine/system or method/process with in the meaning of machine or process” as used in 35 U.S.C. sec. 101. Applicant believes he has established clear and definite interconnections between devices, and functions of devices, which are part of the subject invention of the multifunction data port, by presently amending and correcting claims 9, 13, 15-17, 19 & 20, as is respectfully submitted here.

9. Likewise, applicant respectfully submits that by presently amending the said claims here he has overcome the basis for all obviousness rejections set forth in the Office action.

9.1 Claims 1, 2, 4, 5, 18 & 21, which were rejected under 35 U.S.C. sec. 103 (a) as being “un-patentable over Karlsson (4,442,492) in view of Frew (4,803,632)” may now be reconsidered in light of present amendments to

each and every one of these claims and in light of amendments to the Specifications, more particularly the Background of the Invention.

9.1.1 & 9.12 A) Although the Office action points out some similarities in the operation of the Frew and Karlsson (4,442,492) inventions with the present invention, it would now be obvious to one with ordinary skill in the art to determine that the present invention, as taught in the original application and in present amendments thereto, is a “new and useful improvement thereof,” according to 35 U.S.C. sec. 101, with respect to how the data port “computer 13 in Karlsson receives instructions/commands from a central location 11 via modem 22 and power lines R,S,T,” as stated in the Office action. B) The applicant’s multifunction data port vastly improves upon the meter reading and instruction/command functions between a utility and a utility customer by providing multiple interfaces allowing significant improvements in controlling power consumption while connected between said utility customer’s electronics and appliances—benefiting the utility and the customer as well as those entities connected in a digital services network to said utility and said customer--instead of merely supplying “various types of information about the amount of consumed utilities” as stated in the Office action at page 11.

9.1.2 (B) Unlike Frew, the applicant’s invention, as presently amended here, does not depend for its usefulness on including “a conveniently located remote display unit 26 with display 28” but instead teaches a multifunction data port to which displays, perhaps even Frew’s, may be connected in order to view meter and energy consumption data, while said data port provides multiple interfaces to other electronics and devices within a utility customer’s structure, including other displays within said customer’s structure as well as remote displays for use by the utility company when connected to or coupled with said multifunction data port.

9.1.3 The system of Karlsson and Frew, as stated in the Office action, “perform the same function, but have different structures,” and the Office action also stated that merely moving the location of a device when the position does not affect the operation of the device does not constitute an invention, citing *In re Japikse*, 86 USPQ 70 @ 73 (CCPA, 1950). The applicant’s invention may perform some of---but not only—the same functions as Karlsson and Frew, but because the applicant’s multifunction data port performs many uniquely different functions than Karlsson and/or Frew, and because its location definitely does affect the operation of the said data port device as illustrated in Revised Sheet 5d, depending on the primary users of the said data port, it is respectfully submitted that the

applicant's claims and present amendments herein are easily distinguishable by one of ordinary skill from the inventions and claims of Karlsson and Frew.

9.1.4 In regard to the location of the displayed meter and energy consumption information, the Office action states that "it would have been obvious to one of ordinary skill at the time of the invention that display 21 of Karlsson et al ('492) could be located at any suitable location for the consumer, for example with the consumer's household as taught by Frew et al ('632)." The applicant's invention does not teach a particular location of a display, nor does it teach the use of any particular type of display, but rather teaches a multifunction data port, within the original application and present amendments thereto, to which displays may be connected or coupled such displays to record more than, but which may also include, meter and energy consumption information, and which said data port may offer interfaces which do not depend on a display, per se, but which may constitute, for example, voice data, through a voice interface.

9.1.5 In regard to claims 18 & 21, Karlsson and Frew disclose that a wireless communications link may be used to transmit and receive information/data. The applicant's invention does not depend for its novelty or usefulness on a wireless communication link, per se, but the applicant's multifunction data port, by offering a multiple array of access, process, and communications link options, including wireless, offers a "new and useful process (and) machine" per 35 U.S.C. sec. 101.

10. Examiner's Statement of Reason for Allowance over the prior art has been incorporated into each and every claim, as presently amended:

- A) the use of a voice processor in the data port (claim 3, presently amended);
- B) the storing and retrieval of digitized voice messages that can be sent by telephone or other means when a power outage is detected (claim 6, presently amended);
- C) the communication of an emergency condition to the utility company when a power outage is detected (claim 7, presently amended);
- D) the use of a video processor in the data port (claim 8, presently amended);

- E) the modification of the settings of an internal thermostatic device as a function of the cost of available power (claim 9, presently amended);
- F) the relaying of messages from the utility company through the data port to the internal device (claim 10, presently amended);
- G) the use of the data port to conduct secure transactions and purchases (claims 11-13, presently amended);
- H) detecting breaches in the data port interface as a function of the secure transmittal and reception of information in the internal and external networks (claims 14-17 presently amended);
- I) including a “de-scrambler” in the data port interface with the utility meter’s housing (claim 19, presently amended); and
- J) including a “router” in the data port interface with in the utility meter’s housing or coupled or connected thereto (claim 20, presently amended).

11. It is noted that the Examiner’s response to applicants prior arguments, prior to this response, if not repeated or modified by the 04/01/2005 Office action, have been overcome by the applicant’s last response.

12. The applicant respectfully submits that claims 3 & 8, objected to as being dependent upon a rejected base claim, (claim 1, previously presented, presently amended) are now allowable, along with said base claim, because they have been rewritten in independent form including all the limitations of the base claim and any intervening claims.

12.1 Claims 6, 7, 10-12 & 14 have been rewritten and amended to overcome the rejection by Examiner under 35 U.S.C. sec. 112, and presently include all of the limitations of the base claim and any intervening claims. As amended and rewritten, these and other claims previously rejected now comply with 37 C.F.R. sec. 1.111(b) and section 707.07(a) of the M.P.E.P, as respectfully submitted here.

13. The shortened statutory period of response of three months from the mailing of the office action on 03/22/05 has been complied with as this response was mailed by Express Mail to USPTO before 06/22/05.

14. All communications regarding this application have been addressed to Edward Cosimano or John Weiss in compliance with the most recent Office action.

The amended specifications and claims above are revised also to consistently supply the correct name for the invention throughout the subject application. This reduces confusion from the use of other names that heretofore were only descriptive of some of the limited functions of the invention of the multifunction data port such as “meter computer” and “computer”, as cited by the Examiner in the Office Action of 04/01/2005. Other amendments to the application here are corrections of grammar, spelling and the numbers in figures indicating different parts of the apparatus and steps in the method claims. As the Examiner noted in the recent Office action, a particularly confusing and contradictory statement was made in the amendment of Oct. 4, 2004, by prior counsel and this has been presently amended by Applicant in pro se by removing the following phrase, *“bank 621 may find that vendor is untrustworthy (untrustworthy = YES), then bank 621 may refuse authorization (641) If vendor is trustworthy (untrustworthy = NO)”* and adding language not meant as new matter in order to clarify this section of the Specification.

It is respectfully submitted that no new matter has been added to the presently amended patent application, but the specifications have been amended extensively and claims have been rewritten to reduce ambiguity and confusion cited in the Office Action of 01 April 2005. New claims have been added based on explanations of the specifications in the original, un-amended application. The capabilities and purpose of the multifunction dataport have been more clearly stated in this presently amended application. One example in the present invention of the novel purpose and performance of the multifunction dataport is the inclusion of a scrambler-de-scrambler and/or encryption-decryption devices that would have little purpose in a device designed solely to read meters, but which is a necessary component if the utility is to compete with cable and telephone companies to provide telecommunication with secure Internet access in addition to meter reading and load management. All of the present claims are based on the disclosures in the specifications as first disclosed in the applicant’s patent application serial number 09/667,408 filed on September 21, 2001.

The drawings and descriptions of the multifunction data port have been revised, and all have been labeled, “Replacement Sheets”, and the numbers re-checked with the specifications in accordance with the Examiner’s

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Office actions citing numerous prior errors. A digital service provider or Internet service provider (ISP) has been included in figures 1, 2, 3, & 5 d. The specifications have been amended to remove errors of grammar, reference to numbers in the figures, and spelling. The figure 5 d has been revised to show the multifunction dataport mounted on the power pole. In figures 1, 3 and 5d the multifunction data port is coupled, but external to an utility electric meter.

The Examiner is asked to review the earlier objection of double patenting and determine if the revised claims in the present application still overlap with claims 1-37 of U.S. patent No. 5,699,276. If the Examiner determines that the revised claims for the multifunction data port of the present invention no longer overlap with the claims of the applicant's earlier '276 patent, the applicant requests permission to withdraw the terminal disclaimer that was filed by previous patent counsel

The applicant has attempted to clarify the differences between his earlier '276 patent for a meter-computer and the present invention of a multi-function data port. The applicant notes that it will soon be four years since this patent application was filed with the U.S. patent office and that said applicant is 78 years old. The applicant has attempted to answer and respond to all of the objections of the Examiner and prays that this patent application is now in condition for allowance.